

**To:** Brown, Anthony R (RM)[anthony.brown@bp.com]; Lombardi, Marc[Marc.Lombardi@amecfw.com]; Doug Carey[douglas.carey@waterboards.ca.gov]; chris.stetler@waterboards.ca.gov[chris.stetler@waterboards.ca.gov]  
**Cc:** Greg Reller[gr@burlesonconsulting.com]; Cory Koger[Cory.S.Koger@usace.army.mil]; Serda, Sophia[Serda.Sophia@epa.gov]; Shaffer, Caleb[Shaffer.Caleb@epa.gov]  
**From:** Deschambault, Lynda  
**Sent:** Wed 12/14/2016 3:40:05 PM  
**Subject:** Followup/ Schedule Discussions at December 13 Technical Meeting

Good morning,

Again my sincere apologies for the confusion on the start time yesterday!

The email stating we'd go back to the original agenda, was only circulated internally--- and doesn't look like I copied others. Sorry about that! And thanks for not making me feel Too bad ☺.

- Our meetings are always productive! Yesterday was no exception.

Although we were hopeful to receive a more robust data presentations –and include floodplain data—we had some good discussions on reporting and scheduling to prepare us for an upcoming meeting with legal and managers the week of January 16, 2017. The ultimate goal of that meeting is to reach agreement on an RIFS schedule.

- The good news is, that we seem to have agreement on a Draft RI by December 2017!

- EPA is preparing comments and will provide those shortly. EPA's goal is to have a DRAFT combined RI/FS by December 2017.

(with the understanding that there may be some gaps and placeholders) and the final combined complete RIFS to be completed by June 2018.

- To get to that end, or a date we can agree upon, EPA would appreciate clarity on the ARC requested reporting times that we discussed, and the tasks necessary for those steps.

As you know EPA has requested in previous comments: “*full QC and DQA steps are completed within 120 days of each sampling event. Further, within 180 days after field sampling is completed, ARC shall submit a Technical Data Summary Report/ Draft RIFS section, that includes validated analytical data and data interpretation*”

What we understand from yesterday, is that ARC is requesting as much as 19 months ( 570 days) to Present data.

--October 2015 Sediment data was not completed in time for our meeting yesterday. ARC provided preliminary discussion and proposes a March 2017 submittal == 17 months or 510 days

--During our meeting yesterday ARC requested that the Oct 2015 floodplain data be presented in June 2017==19 months--or 570 days after collection.

Below is my understanding of our discussion of the ARC timeline.

Please provide additional detail to support the ARC timelines and identify areas where the process could be streamlined and expedited.

- Oct 2015 Sampling complete
  - Lab results -- 5 months or 150 days
  - 3<sup>rd</sup> party validation --3 months + 90 days
- Database Presentation with flags, write QCSR/ DQA—1 month + 30 days
  - Risk EPC's – 1 month + 30 days
  - Technical evaluation, ID data gaps, maps, profiles, cross sections, etc—2 months + 60 days
  - TOTAL 12 months or 360 DAYS-- for TDSR 2015 data== by October 2016(?)

I believe ARC indicated that the process for 2016 data might be shortened?

Please provide a similar chart to identify the timing and process for the ARC proposal--- that data collected by October 2016 would be provided to EPA by June 2017—210 days?

- Oct 2016 Sampling complete
- Lab results – xx days?
- 3<sup>rd</sup> party validation –XX days?
- Data Presentation with flags, write QCSR/ DQA—xx days?
- Risk EPC's – xx days?
- Technical evaluation, maps, profiles, cross sections—xx days?
- TOTAL 8 months or 210 DAYS-- for all TDSR all media thru 2016 data by June 2017?
- TOTAL DRAFT RI by December 2017

Lynda

**From:** Deschambault, Lynda

**Sent:** Wednesday, December 07, 2016 7:46 AM

**To:** Shaffer, Caleb <Shaffer.Caleb@epa.gov>; Wirtschafter, Joshua <Wirtschafter.Joshua@epa.gov>

**Cc:** Riley, Gary <riley.gary@epa.gov>; Greg Reller <gr@burlesonconsulting.com>; Cory Koger <Cory.S.Koger@usace.army.mil>; Black, Ned <Black.Ned@epa.gov>; Serda, Sophia <Serda.Sophia@epa.gov>

**Subject:** EPA Comments on Schedule: Meeting to Discuss schedule is Postponed to January

Hello again,

Okay, we'll stick to the original technical agenda for 12/13 (in person at AMEC re: Sediment and floodplain soils)

and find another time that works for a meeting with ARC on the RI/FS Schedule.

**From:** Brown, Anthony R (RM) [mailto:anthony.brown@bp.com]  
**Sent:** Tuesday, December 06, 2016 4:15 PM  
**To:** Deschambault, Lynda <Deschambault.Lynda@epa.gov>; Lombardi, Marc <Marc.Lombardi@amecfw.com>  
**Subject:** RE: Presentation Materials, Early Start, Add Schedule to Agenda: December 13 Technical Meeting

Hi Marc, request AMECFW address Lynda's request for providing presentation materials by EOD 12/8 and provide her an update ASAP. Thanks... Tony...

**From:** Deschambault, Lynda [mailto:Deschambault.Lynda@epa.gov]  
**Sent:** Tuesday, December 06, 2016 2:58 PM  
**To:** Brown, Anthony R (RM)  
**Cc:** Lombardi, Marc (marc.lombardi@amecfw.com); Cohen, Adam; Halsey, Ronald H; Wirtschafter, Joshua; Greg Reller; Cory Koger; Black, Ned; Serda, Sophia; Shaffer, Caleb  
**Subject:** FW: Presentation Materials, Early Start, Add Schedule to Agenda: December 13 Technical Meeting

Thanks Tony,

You are correct about technical meetings being technical--and that is still our intent as well.

We were optimistic that we could discuss this item after the close of our technical meeting on sediment & floodplain soils.

Please let us know your availability for week of January 9<sup>th</sup> or January 16<sup>th</sup> for an in-person meeting in San Francisco.

EPA requests that technical representatives be present for this meeting. EPA's "other tech support" participants will include: Greg Reller, Cory Koger, and if available: Dr. Black and Dr. Serda. The ARC technical issues related to the schedule include items such as: the time necessary for EPA to receive technical reports, the content of those reports (data usability and risk), and also the parallel completion of both the Risk Assessments and the Feasibility study -- for one final and complete RI/FS report.

We do believe that a free exchange of information face-to-face and the opportunity for legal counsel to understand and hear technical concerns is essential for us to come to agreement on an RI/FS schedule

We will stick to the original agenda.

As requested, please provide the presentation materials (see below) by EOD on 12/8/16

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

Please be advised I may have limited access to email , therefore please be patient with any communication delays.

**From:** Brown, Anthony R (RM) [<mailto:anthony.brown@bp.com>]

**Sent:** Monday, December 05, 2016 6:16 PM

**To:** Deschambault, Lynda <[Deschambault.Lynda@epa.gov](mailto:Deschambault.Lynda@epa.gov)>

**Cc:** Halsey, Ronald H <[ronald.halsey@bp.com](mailto:ronald.halsey@bp.com)>; Cohen, Adam <[Adam.Cohen@dgsllaw.com](mailto:Adam.Cohen@dgsllaw.com)>; Lombardi, Marc <[Marc.Lombardi@amecfw.com](mailto:Marc.Lombardi@amecfw.com)>

**Subject:** FW: Presentation Materials, Early Start, Add Schedule to Agenda: December 13 Technical Meeting

Lynda – Your November 29 revised agenda for the December 13 technical meeting proposes to add a two-hour session (from 1:30 to 3:30) to discuss completion of the RI/FS, including the format and schedule for the draft and final RI/FS reports. You indicated that EPA management (Caleb Shaffer), counsel (Josh Wirtschafter), and “other tech support” (not identified) would participate in this discussion. The quarterly technical meetings were set up to allow for a free-exchange of technical information between ARC and EPA. Both sides have consistently agreed that the meetings should be limited to technical personnel to avoid diverting attention to legal and administrative matters. For this reason, ARC did not arrange, and is not prepared, to have management and legal counsel available on December 13. We cannot participate in discussions involving EPA management and counsel without having our own representatives present. We also do not believe it is an efficient use of our entire technical team’s time to be involved in this discussion. Accordingly, ARC requests that the agenda topics for the December 13 meeting be limited to those listed in your October 28 email (stream sediment, floodplain soil, and remaining field work). We think there is enough to talk about concerning those technical topics to fill the allotted time. We agree that ARC and EPA should discuss RI/FS scheduling issues, but we believe a separate meeting involving a different group should be arranged. Please propose dates in January 2017 when EPA’s team, including Caleb and Josh, are available for a meeting on RI/FS scheduling and reporting (presumably in San Francisco). I can then check on the availability of the ARC representatives who would need to participate. Thank you.

Anthony R Brown

Operations Project Manager – Mining

Atlantic Richfield Company

Remediation Management

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**From:** Deschambault, Lynda [<mailto:Deschambault.Lynda@epa.gov>]  
**Sent:** Tuesday, November 29, 2016 3:10 PM  
**To:** Brown, Anthony R (RM)  
**Cc:** Riley, Gary; Greg Reller; Cory Koger; Black, Ned; Shaffer, Caleb; Lombardi, Marc ([marc.lombardi@amecfw.com](mailto:marc.lombardi@amecfw.com)); Doug Carey; [chris.stetler@waterboards.ca.gov](mailto:chris.stetler@waterboards.ca.gov); Hillenbrand, John; Chang-Minami, Kay SPK; Patty Cubanski; Serda, Sophia; Black, Ned  
**Subject:** RE: Presentation Materials, Early Start, Add Schedule to Agenda: December 13 Technical Meeting

Dear Mr. Brown:

I wanted to follow-up on two items regarding our upcoming technical meeting. :

- Presentation Materials: I have some use-or-lose time and will be out of the office Dec 8,9 and 12.

Please provide the requested presentation materials (see below) EOD on 12/8/16 with a cc to all those on this list. And include the webinar call in information

- Timing and Agenda:
  - o We would like to start the meeting earlier: 9 am instead of 10 am
  - o We would like to add "Format, Schedule and Reporting for Draft RI/FS and final RI/FS completion" to the agenda for 1:30

## DRAFT AGENDA

9am: Introductions, Safety Moment

Stream Sediment

Available data (QCSR and DQA)

Stream Profiles

Screening benchmark comparisons (risk assessment calculations)

Reference Comparison

Elevated risks attributable to the site;

Implications for the FS

Floodplain Soil

Available data (QCSR and DQA )

Stream Profiles

Screening benchmark comparisons (risk assessment calculations)

Reference Comparison

Elevated risks attributable to the site;

Implications for the FS

12 noon      Lunch break

1pm          Wrap up next steps on Sediment and floodplain

1:30          Format, Schedule and Reporting for Draft RI/FS and final RI/FS  
completion”

Caleb Shaffer in Person; Legal Counsel Wirtschafter and Other tech  
support by Phone

Discuss RIFS Format/ Structure/ Content: See ARC's, March 13, 2015 and December  
4, 2015 RI/FS Table of Contents (TOC) and RTC).

Discuss Schedule: See ARC's June 3, 2016 Remedial Investigation/Feasibility Study Schedule Update, and

Interim reports to the Draft RI/FS: See ARC's September 9, 2016 Reporting Options for Upcoming Interim RI Submittals.

3:30                    Field work remaining in 2017; this and other media

EPA requested 14 day summary of:

Work not completed under approved TSAP for 2016 field season

Work not completed that EPA requested under conditional  
approved TSAPs

New work ARC is planning??

4:30                    Wrap up/ Next steps/ Next meeting

**From:** Deschambault, Lynda

**Sent:** Tuesday, November 22, 2016 4:18 PM

**To:** 'Brown, Anthony R (RM)' <[anthony.brown@bp.com](mailto:anthony.brown@bp.com)>

**Cc:** Gary Riley <[Riley.Gary@epa.gov](mailto:Riley.Gary@epa.gov)>; Greg Reller <[gr@burlesonconsulting.com](mailto:gr@burlesonconsulting.com)>; Cory Koger <[Cory.S.Koger@usace.army.mil](mailto:Cory.S.Koger@usace.army.mil)>; Black, Ned <[Black.Ned@epa.gov](mailto:Black.Ned@epa.gov)>; Shaffer, Caleb <[Shaffer.Caleb@epa.gov](mailto:Shaffer.Caleb@epa.gov)>; Lombardi, Marc ([marc.lombardi@amecfw.com](mailto:marc.lombardi@amecfw.com)) <[marc.lombardi@amecfw.com](mailto:marc.lombardi@amecfw.com)>; Doug Carey <[douglas.carey@waterboards.ca.gov](mailto:douglas.carey@waterboards.ca.gov)>; 'chris.stetler@waterboards.ca.gov' <[chris.stetler@waterboards.ca.gov](mailto:chris.stetler@waterboards.ca.gov)>; Hillenbrand, John <[Hillenbrand.John@epa.gov](mailto:Hillenbrand.John@epa.gov)>; Chang-Minami, Kay SPK <[Kay.Chang-Minami@usace.army.mil](mailto:Kay.Chang-Minami@usace.army.mil)>; Patty Cubanski <[pc@burlesonconsulting.com](mailto:pc@burlesonconsulting.com)>

**Subject:** Presentation Materials for December 13 Technical Meeting

Dear Mr. Brown.

We look forward to our December 13<sup>th</sup> technical meeting at the AMEC office!

10940 White Rock Road, Suite 190,

Rancho Cordova, CA 95670

Our meetings are always productive and informative. Please provide/share the webinar login information.

Also as promised, we have put together a list of basic graphics that ARC should provide in a Powerpoint to EPA in advance of the meeting. During past technical meetings, presentation graphics are often inconsistent or poorly presented. EPA provides this higher level of detail and looks forward to a productive meeting with graphics that will assist in understanding the stream sediment and floodplain soil ; and provide for robust conversation.

- 1) Overview maps that show sample locations (one or two maps to scale)
- 2) Stream profiles of metal concentration versus distance downstream from a selected point ( for example: Station 1, Station 15, CUD) The X axis should be in linear length units and should be the same for all comparable graphs. The Y axis should be the same for comparable graphs, and could be either linear or log (please pick ONE of these and use consistently throughout the graphics for each comparable set of images) depending on the concentration range.
  - a. Comparable graphs/images are those showing the same reach of the stream system, and/or same chemical.
  - b. Start with the whole system (ie Leviathan Creek to the bottom of Bryant Creek)
  - c. Each stream profile should include the stream sediment, category 1, category 2, and category 3 floodplain soil data; each as a separate profile line with different colors AND symbols that are easily distinguishable at the presentation scale and format.
  - d. Symbols must be consistent (ie do NOT use a blue square for stream sediment on one figure and category 2 floodplain soil on another figure...)
  - e. After showing the entire stream profile (ie from the chosen starting point in Leviathan Creek to the bottom of Bryant Creek), please provide enlarged profiles of any areas of interest.
- 3) Transects of metal concentrations for stream sediment AND category 1, category 2, and category 3 floodplain soil data. Select the transects based on areas of interest (i.e. from the stream profiles). These should follow the same rules as the stream profiles (ie consistent scales, symbols, etc.) please Provide index maps showing transect locations.

a. Each transect should include a diagram of the location of the differing floodplain soil and stream sediments with respect to one another.

4) If there are widely used sediment screening benchmarks (note that these should also apply to what ARC calls 'floodplain soil') these should be shown on the profiles for comparison and to assist in visually showing the significance of the analytical results.

5) At a minimum please provide profiles for arsenic, copper, nickel, and thallium.

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

Please be advised I may have limited access to email , therefore please be patient with any communication delays.

**From:** Deschambault, Lynda

**Sent:** Friday, October 28, 2016 8:15 AM

**To:** Brown, Anthony R (RM) <[anthony.brown@bp.com](mailto:anthony.brown@bp.com)>

**Cc:** Gary Riley <[Riley.Gary@epa.gov](mailto:Riley.Gary@epa.gov)>; Greg Reller <[gr@burlesonconsulting.com](mailto:gr@burlesonconsulting.com)>; Cory Koger <[Cory.S.Koger@usace.army.mil](mailto:Cory.S.Koger@usace.army.mil)>; Patty Cubanski <[pc@burlesonconsulting.com](mailto:pc@burlesonconsulting.com)>; 'Chang-Minami, Kay SPK' <[Kay.Chang-Minami@usace.army.mil](mailto:Kay.Chang-Minami@usace.army.mil)>; Serda, Sophia <[Serda.Sophia@epa.gov](mailto:Serda.Sophia@epa.gov)>; Black, Ned <[Black.Ned@epa.gov](mailto:Black.Ned@epa.gov)>; Wirschafter, Joshua <[Wirschafter.Joshua@epa.gov](mailto:Wirschafter.Joshua@epa.gov)>; Hillenbrand, John <[Hillenbrand.John@epa.gov](mailto:Hillenbrand.John@epa.gov)>; Doug Carey <[douglas.carey@waterboards.ca.gov](mailto:douglas.carey@waterboards.ca.gov)>; 'Chris.Stetler@waterboards.ca.gov' <[Chris.Stetler@waterboards.ca.gov](mailto:Chris.Stetler@waterboards.ca.gov)>; 'Lombardi, Marc' <[Marc.Lombardi@amecfw.com](mailto:Marc.Lombardi@amecfw.com)>

**Subject:** December 13 Technical Meeting

Dear Mr. Brown,

EPA looks forward to our next technical meeting. Here is a proposed agenda and logistics. EPA anticipates that ARC will provide a Technical Data Summary Report (TDSR) on Sediment and Floodplain soils in advance of the meeting. Preferably 72 hours in advance.

- DURATION: Let's plan for the full day: 10 am to 4pm. Confirm location is it Waterboard or AMEC office?
- WEBINAR: Please set up a webinar for those who can't attend the whole meeting
- AGENDA: Here is a draft. EPA looks forward to a review and discussion of the following items:

#### DRAFT AGENDA

Introductions

Safety Moment

Stream Sediment

Available data (QCSR and DQA)

Stream Profiles

Screening benchmark comparisons (risk assessment calculations)

Reference Comparison

Elevated risks attributable to the site;

Implications for the FS

Floodplain Soil

Available data (QCSR and DQA )

Stream Profiles

Screening benchmark comparisons (risk assessment calculations)

Reference Comparison

Elevated risks attributable to the site;

Implications for the FS

Field work remaining in 2017; this and other media

Wrap up/ Next steps

EPA would like to note that at Leviathan, Stream Sediment is defined as the active sediment in the upper two centimeters of the stream channel. Deeper or more stationary sediment is classified as floodplain soil. The discussion at our meeting, and the data in the TDSR should include both stream sediment and floodplain soil as they are defined at Leviathan.